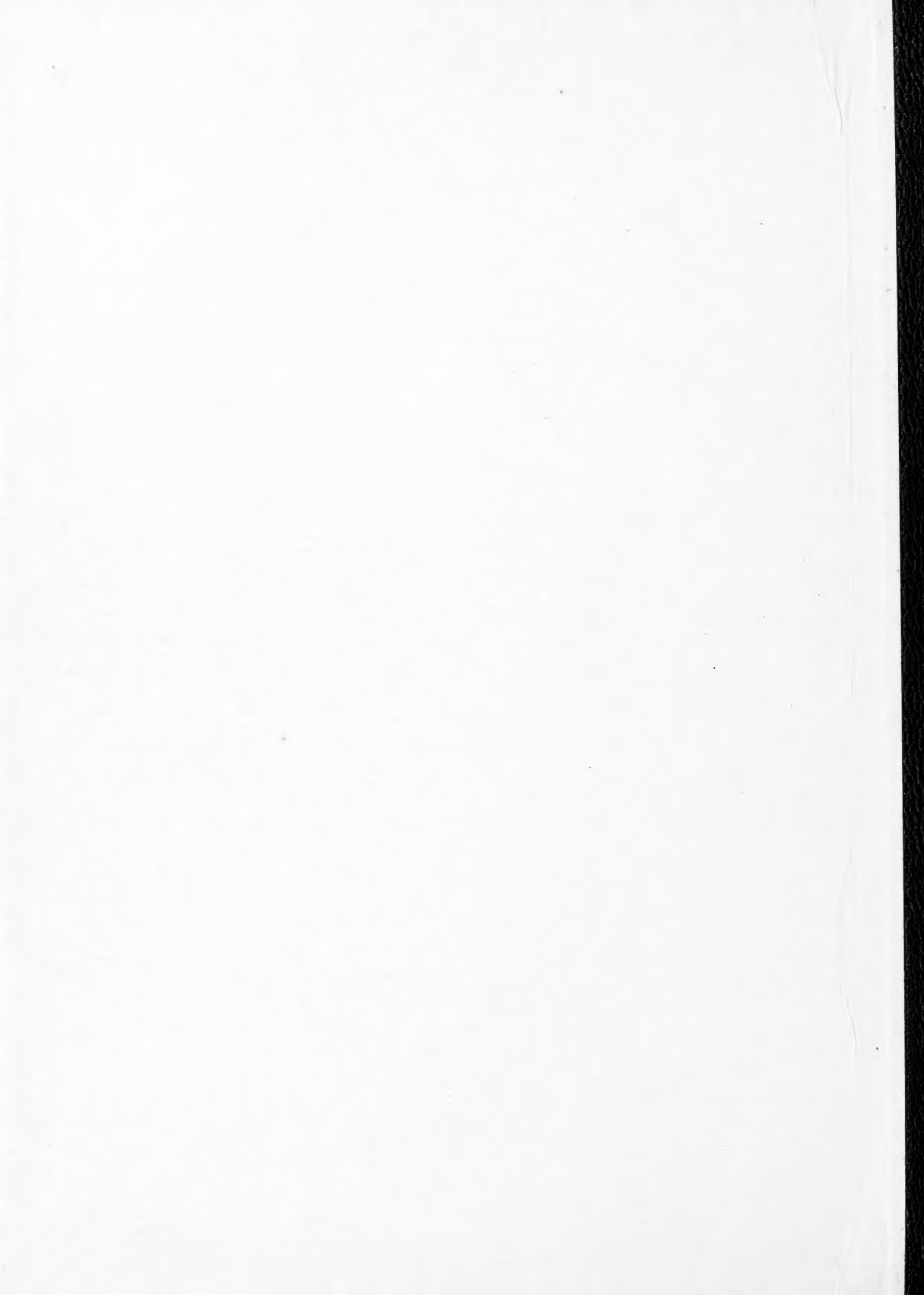


FOREST SERVICE ATLAS,  
STATISTICS,  

---

1907.





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U.S.  
Dept. of Ag.

(UNITED STATES DEPARTMENT OF AGRICULTURE)

U.S. FOREST SERVICE

(GIFFORD PINCHOT, FORESTER)

# FOREST SERVICE ATLAS

EXTRACTS FROM THE STATISTICAL VOLUME  
OF THE FOREST ATLAS FOR  
THE FISCAL YEAR  
1907



COMPILED BY THE OFFICE OF GEOGRAPHY

WASHINGTON

ENGRAVED AND PRINTED BY THE U. S. GEOLOGICAL SURVEY

1908

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LETTER OF TRANSMITTAL

U. S. DEPARTMENT OF AGRICULTURE,  
FOREST SERVICE,

*Washington, D. C., June 15, 1908.*

SIR: I have the honor to transmit herewith extracts selected from the statistical volume of the Forest Atlas for 1907, and to recommend their publication.

Respectfully,

GIFFORD PINCHOT,

*Forester.*

HON. JAMES WILSON,  
*Secretary of Agriculture.*

## EXPLANATORY

The following pages show selected extracts from the statistical volume of the Forest Atlas for the fiscal year ended June 30, 1907. A manuscript volume is compiled each year by the Office of Geography, and the facts set forth constitute an official reference record of the work of the Forest Service for the fiscal year. In order to make the Atlas more valuable as a work of reference, there is included, in addition to the Forest Service reports, information on various other subjects related to forestry, which is taken from official and authentic sources.

Since many members of the Forest Service have no opportunity to consult the original volumes, these pages are reproduced for their information and convenience. On the diagrammatic maps each National Forest is represented by a square, proportionate to its area, which is placed as near as possible to the actual geographic location of the Forest. The exact location of the squares, however, is of only secondary importance, because the principal purpose of the diagrams is to indicate the proportionate areas, conditions, and transactions upon the Forests in a direct and graphic manner.

The information presented is thought to be of interest not only to the members of the Service but to the users of the National Forests as well. This Atlas is not designed for general circulation, but a limited number of copies will be reserved for distribution among libraries, educational institutions, and associations devoted to the interests of forestry or to the conservation of other natural resources.

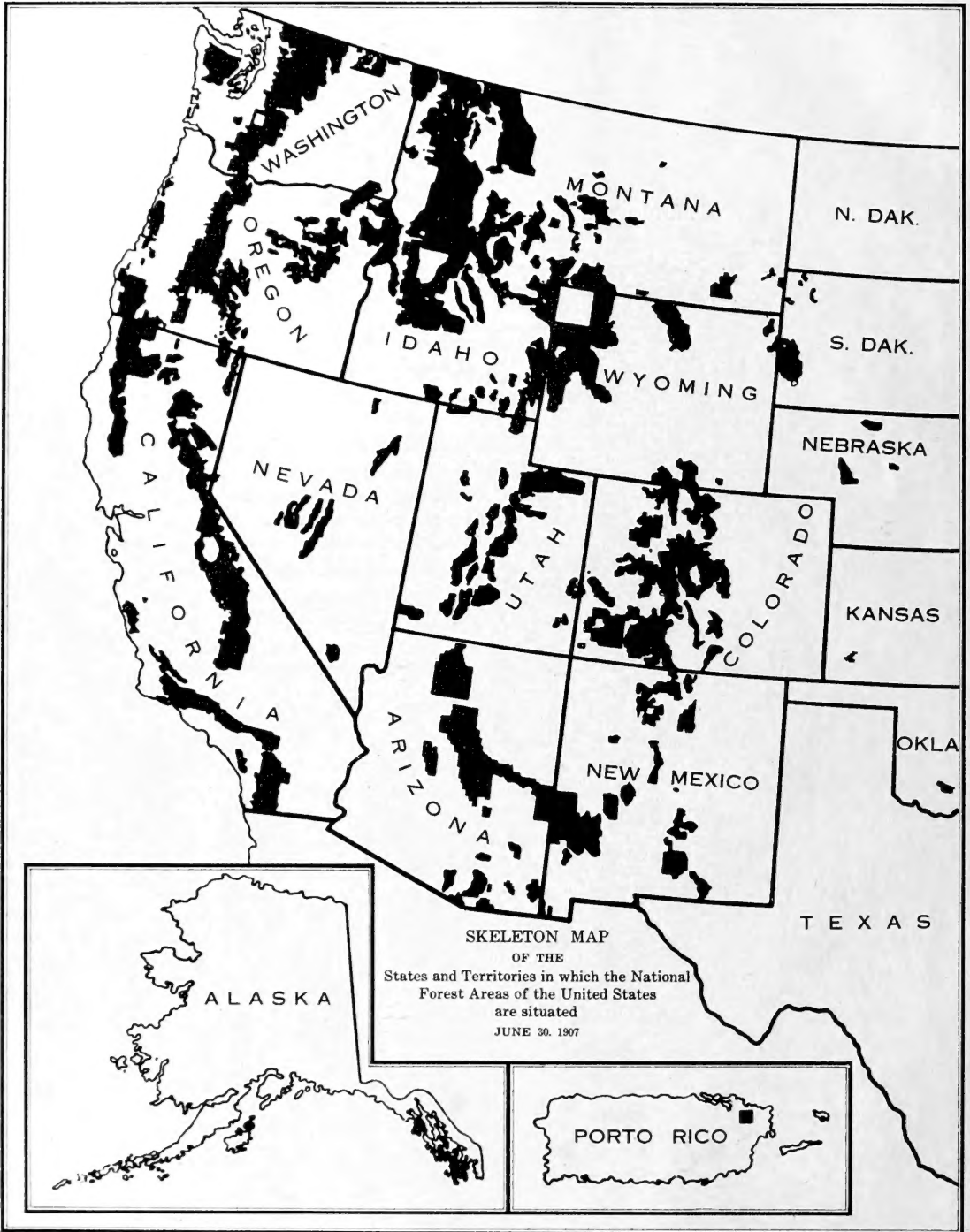
FRED G. PLUMMER,

*Geographer.*



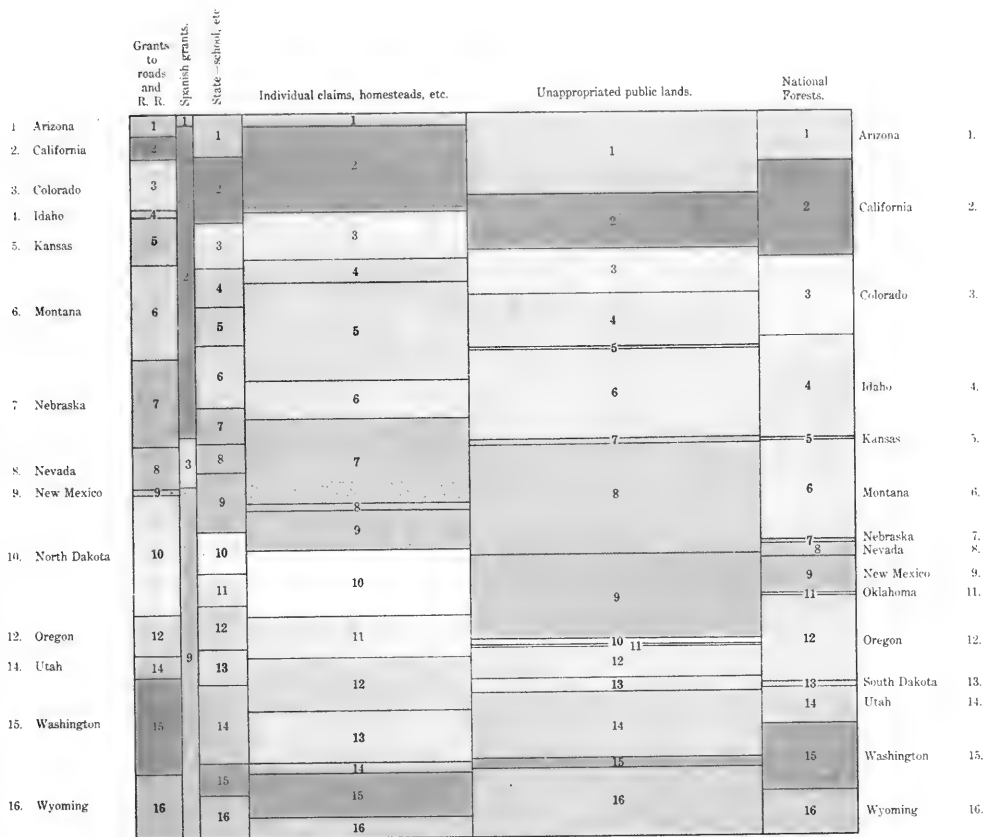
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## DISPOSAL OF LANDS IN THE SIXTEEN WESTERN STATES.

June 30, 1907.



Total area of land surface acres.

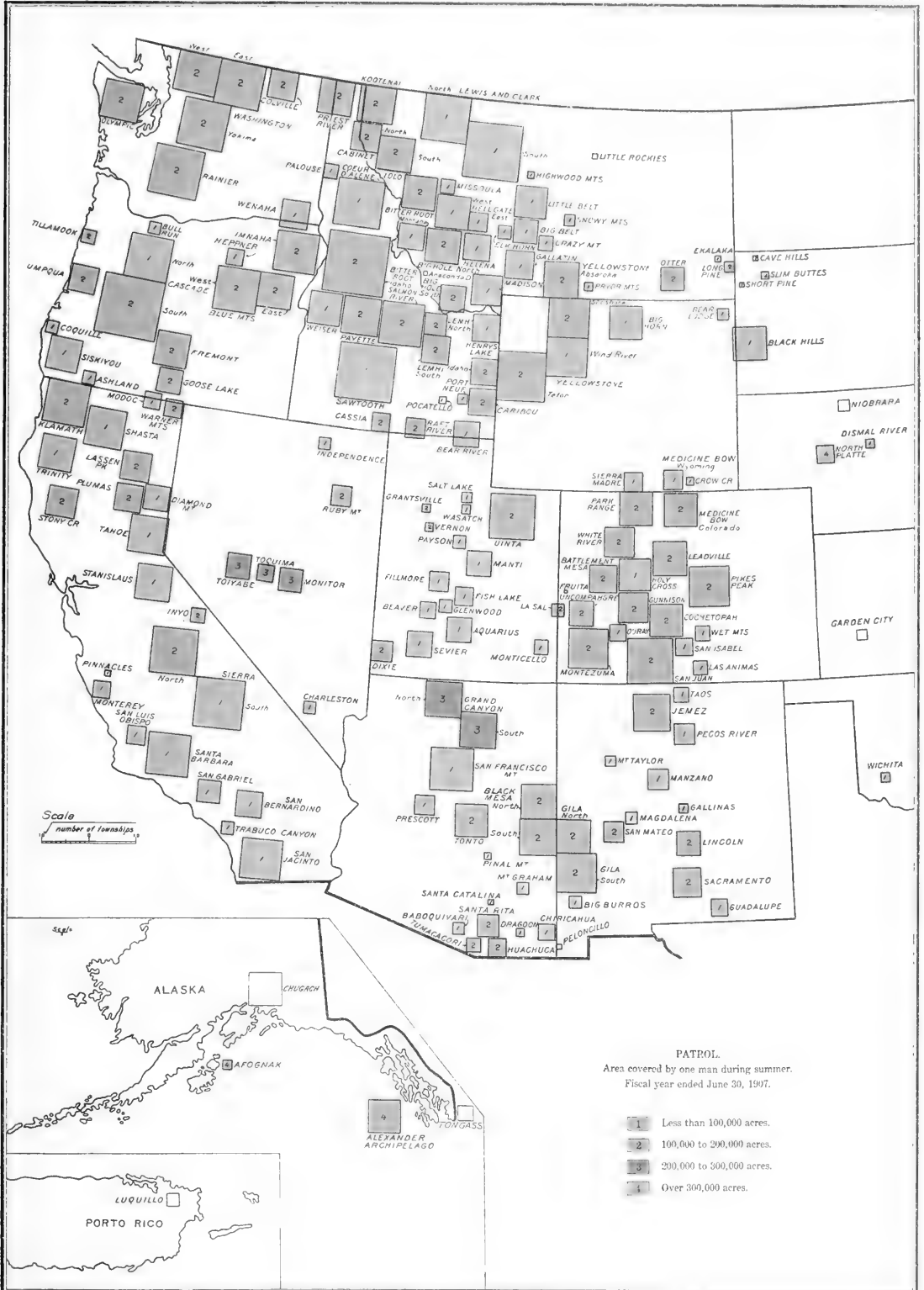
Scale: One square inch to 35,000,000 acres.

State.	Acres.
Arizona . . . . .	72,857,600
California . . . . .	99,898,850
Colorado . . . . .	66,341,120
Idaho . . . . .	53,618,560
Kansas . . . . .	52,335,360
Montana . . . . .	93,298,640
Nebraska . . . . .	49,157,120
Nevada . . . . .	70,285,440
New Mexico . . . . .	78,401,920
North Dakota . . . . .	44,917,120
Oklahoma . . . . .	44,424,960
Oregon . . . . .	61,188,480
South Dakota . . . . .	49,195,520
Utah . . . . .	52,597,760
Washington . . . . .	42,775,040
Wyoming . . . . .	62,460,160
<b>Total . . . . .</b>	<b>993,751,680</b>

**Explanation.**

The above diagram is approximately correct.  
 The National Forest areas do not include alienated land, as exact figures for all forests were not available.



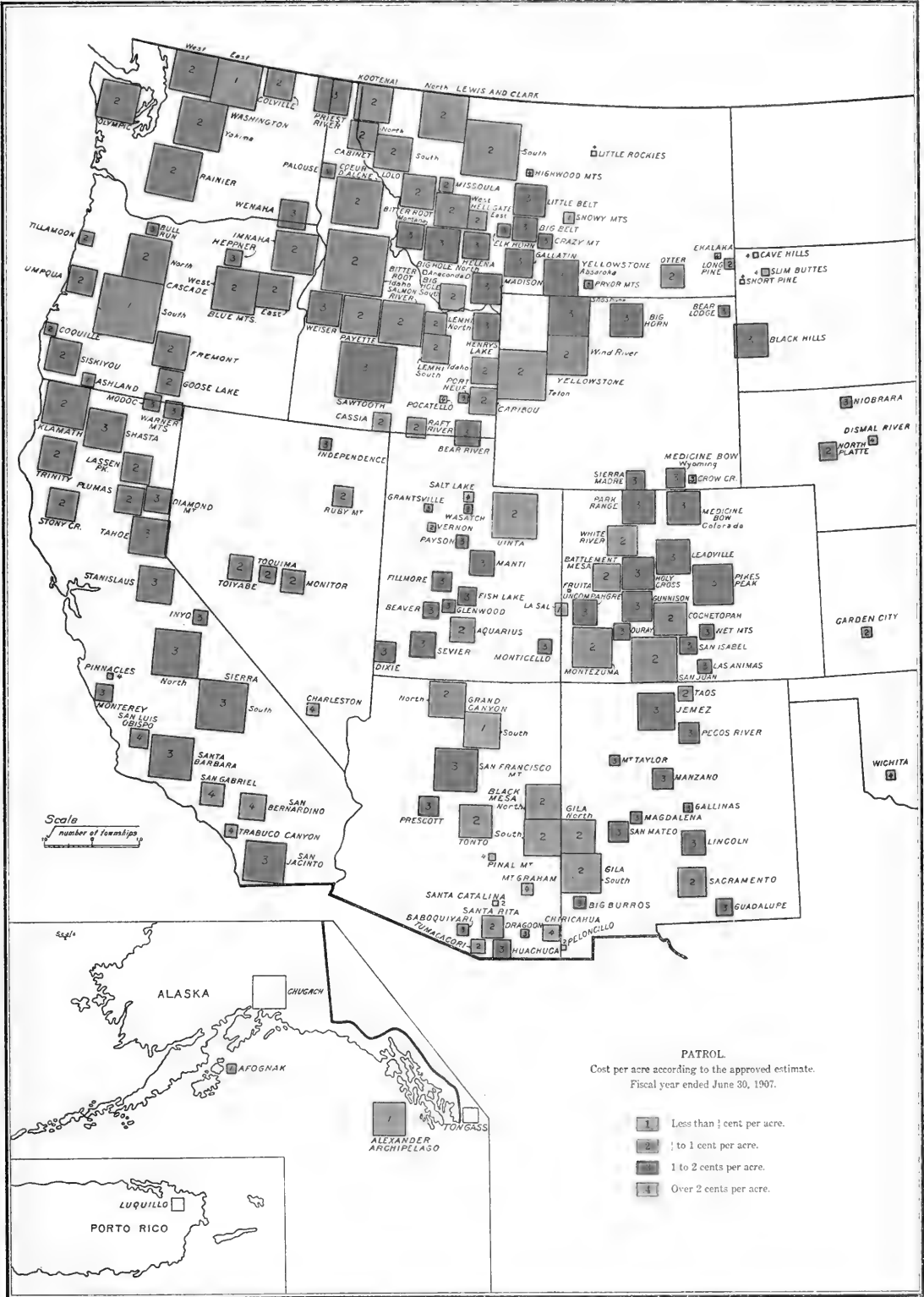




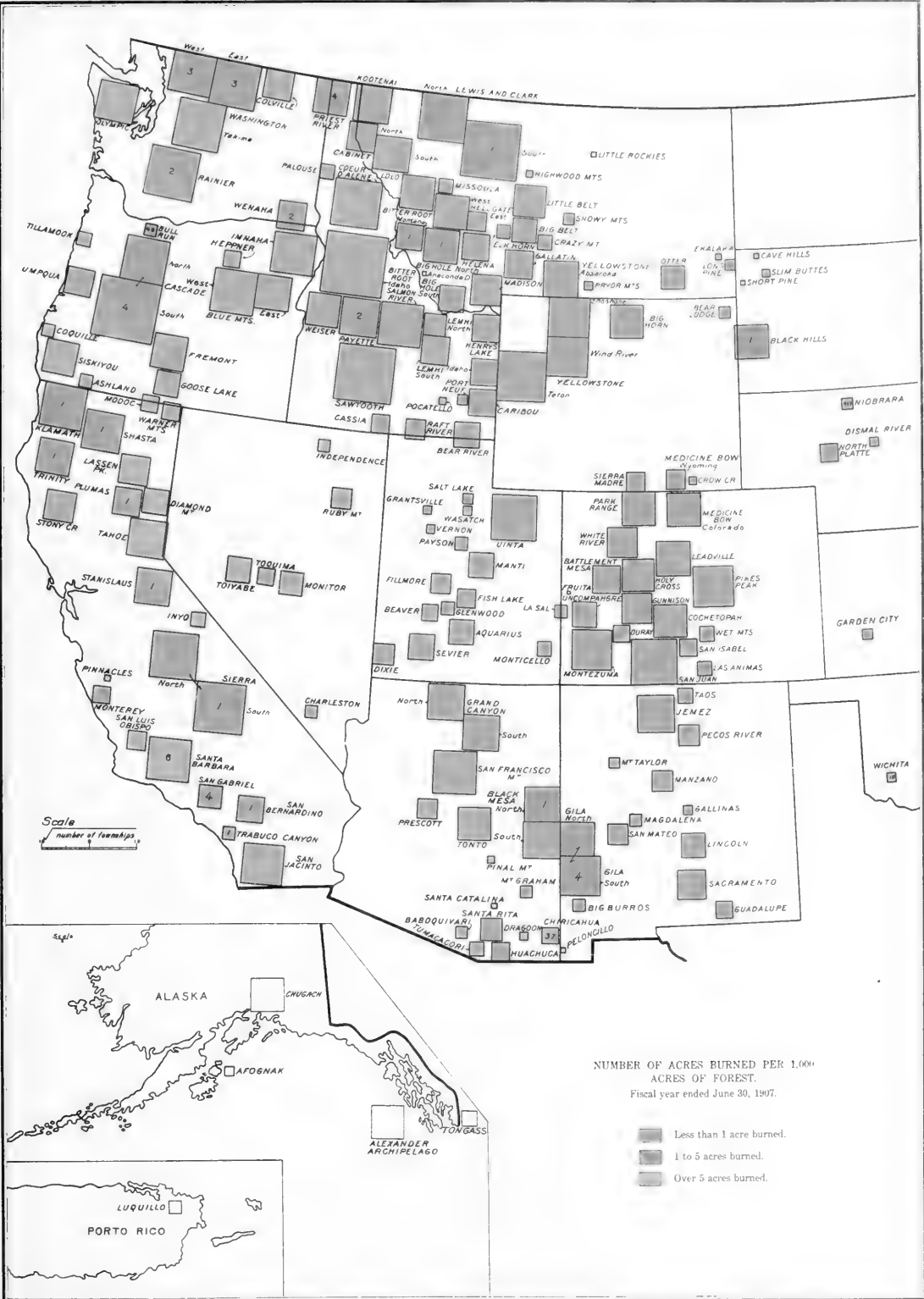














## COMMUNICATION.

NUMBER OF MILES CONSTRUCTED SINCE THE CREATION OF THE FORESTS, TO JUNE 30, 1907.

State and Forest.	Roads.			Railways.		Trails.		Telegraph lines.	Telephone lines.	
	County.	Private.	Government.	Standard gauge.	Narrow gauge or tram.	Private.	Government.		Private or corporate.	Government.
<b>ALASKA:</b>										
Afognak										
Alexander Archipelago			3		5	7			7	
Chugach				15			27	27		
Tongass		20 to 35								
<b>ARIZONA:</b>										
Baboquivari										
Black Mesa (N)									15	
Black Mesa (S)										
Chiricahua	4	14				35	15		6	5
Dragoon										
Grand Canyon (N)			40				12½			
Grand Canyon (S)		10	5	25		14		25	6	
Huachuca										
Mount Graham							10		4	
Pinal Mountains	7	2				3				
Prescott	25	65		41	5½	30		70	153½	
San Francisco Mountains	50	10		35		15			20	
Santa Catalina	2						15			
Santa Rita		3		4		3		4	12	
Tonto	10	4½					125			
Tumacacori										
<b>CALIFORNIA:</b>										
Diamond Mountain				3	½		12		1	
Inyo					¾					
Klamath	15	10				40	250		32	
Lassen Peak	5	4				3			6	
Modoc										
Monterey							9½			
Pinnacles							3			
Plumas	3	70		65		45	27		66	
San Benito										
San Bernardino		40				25	51		40	
San Gabriel		8				50	50		30	70
San Jacinto	7	16					25		30	
San Luis Obispo			1				30			
Santa Barbara		100				50	1000		10	6
Shasta	3	10			2	25	27	100	44	66
Sierra (N)		83	16	2	8		30		45	
Sierra (S)	15	40	6			55	65		52	38
Sierra (E)		15				1			10	
Stanislaus		7½		7½	1	9	8		51	8½
Stony Creek										
Tahoe		1								1½
Trabuco Canyon							12			
Trinity		10				20	75		27	
Warner Mountains	8	4							20	
<b>COLORADO:</b>										
Battlement Mesa	14	60	63	4½			180	4½	15	
Cochetopa		3½							2½	
Fruita										
Gunnison	5	15	7			13	72	30	8	
Holy Cross	20	35			1				6	
La Sal		6							1	

<sup>a</sup>Temporary logging railroad.<sup>b</sup>Old trails, 20; new trails, 50.



COMMUNICATION—Continued.

NUMBER OF MILES CONSTRUCTED SINCE THE CREATION OF THE FORESTS, TO JUNE 30, 1907.

State and Forest.	Roads.			Railways.		Trails.		Telegraph lines.	Telephone lines.	
	County.	Private.	Government.	Standard gauge.	Narrow gauge or tram.	Private.	Government.		Private or corporate.	Government.
COLORADO—Continued:										
Las Animas.....										
Leadville.....										
Medicine Bow (Colo. Div.).....		6					25			
Montezuma.....	43	214			2½	9½	1½		19	
Ouray.....										
Park Range.....	16	35					5		15	
Pikes Peak.....	85½	138	14	41	6	25	35	48	85	
San Isabel.....		2½	5			9	69			
San Juan.....	34	47½				8	9		27	
Uncompahgre.....		18								
Wet Mountains.....	27	10				23	48		1½	
White River.....	60	100				250	50		10	
IDAHO:										
Bear River.....										
Big Hole (S).....										
Bitter Root.....		30				50	300		56	
Cabinet (S).....		5				10				
Caribou.....										
Cassia.....		50	10							
Coeur d'Alene.....										
Henry's Lake.....				18						
Kootenai.....							24			
Lemhi (N).....										
Lemhi (S).....									12	
Palouse.....										
Payette.....									71	
Pocatello.....		9					3			
Port Neuf.....		5								
Priest River.....	25	55				150	15			
Raft River.....		36								
Salmon River.....										
Sawtooth.....		2							29	
Weiser.....	2	9		3		5	1	3	6	
Yellowstone (Idaho Div.).....										
KANSAS:										
Garden City.....										
MINNESOTA:										
Minnesota.....				12						
MONTANA:										
Big Belt.....		1		5						
Big Hole (Ana. Div.).....		10			1	30	5			
Big Hole (N).....										
Big Hole (S).....										
Bitter Root (Mont. Div.).....		18					54		2	
Cabinet (N).....										
Cabinet (S) (See Idaho).....										
Crazy Mountains.....	3	16					24			
Ekalaka.....										
Elkhorn.....										
Gallatin.....										
Helena.....	25	50		8		20				
Hell Gate (E).....	7	30				50	6			14

<sup>a</sup>State road.









COMMUNICATION—Continued.

NUMBER OF MILES CONSTRUCTED SINCE THE CREATION OF THE FORESTS, TO JUNE 30, 1907.

State and Forest.	Roads.			Railways.		Trails.		Telegraph lines.	Telephone lines.	
	County.	Private.	Government.	Standard gauge.	Narrow gauge or tram.	Private.	Government.		Private or corporate.	Government.
<b>OREGON—Continued:</b>										
Fremont .....	17	125	8			4	3			6
Goose Lake .....	10	66	4		6					12
Heppner .....	54	60								18
Imnaha .....	7	32	4			65	15			4
Siskiyou .....										
Tillamook .....		3				5				
Umpqua .....										9
Wenaha .....	3									
<b>SOUTH DAKOTA:</b>										
Black Hills .....	100	50		35	24					115
Cave Hills .....		7								
Short Pine .....										
Slim Buttes .....		2								
<b>UTAH:</b>										
Aquarius .....	12						180			
Bear River .....										
Beaver .....										
Dixie .....		15								
Fillmore .....										
Fish Lake .....										
Glenwood .....										
Grantsville .....										
La Sal (See Colo.) .....										
Manti .....	9	46								
Monticello .....										
Payson .....							12			
Raft River (See Idaho) .....										
Salt Lake .....										11½ 4
Sevier .....	2½	3					9			20
Uinta .....	10		20				747			20
Vernon .....										
Wasatch .....										½
<b>WASHINGTON:</b>										
Colville .....	35						5			44
Olympic .....			4			25	70			
Priest River .....										
Rainier .....		3	8			75	48		2½	7
Washington (Chelan Div.) .....	50	50				50	50		30	54
Washington (W.) .....	5½	6	3	½	10	300	10	½	14	
Washington (Wenat. Div.) .....				11						
Wenaha (See Oregon) .....										
<b>WYOMING:</b>										
Bear Lodge .....										7½
Big Horn .....	83	57	55				755		45	52
Black Hills (See S. Dakota) .....										
Caribou .....										
Crow Creek .....										
Medicine Bow (Wyo. Div.) .....		3					8		13	
Sierra Madre .....										
Uinta (See Utah) .....										
Yellowstone (Shos. Div.) .....	50		26				250		12	5
Yellowstone (Teton Div.) .....			12				200		12	
Yellowstone (W. R. Div.) .....		10					200			



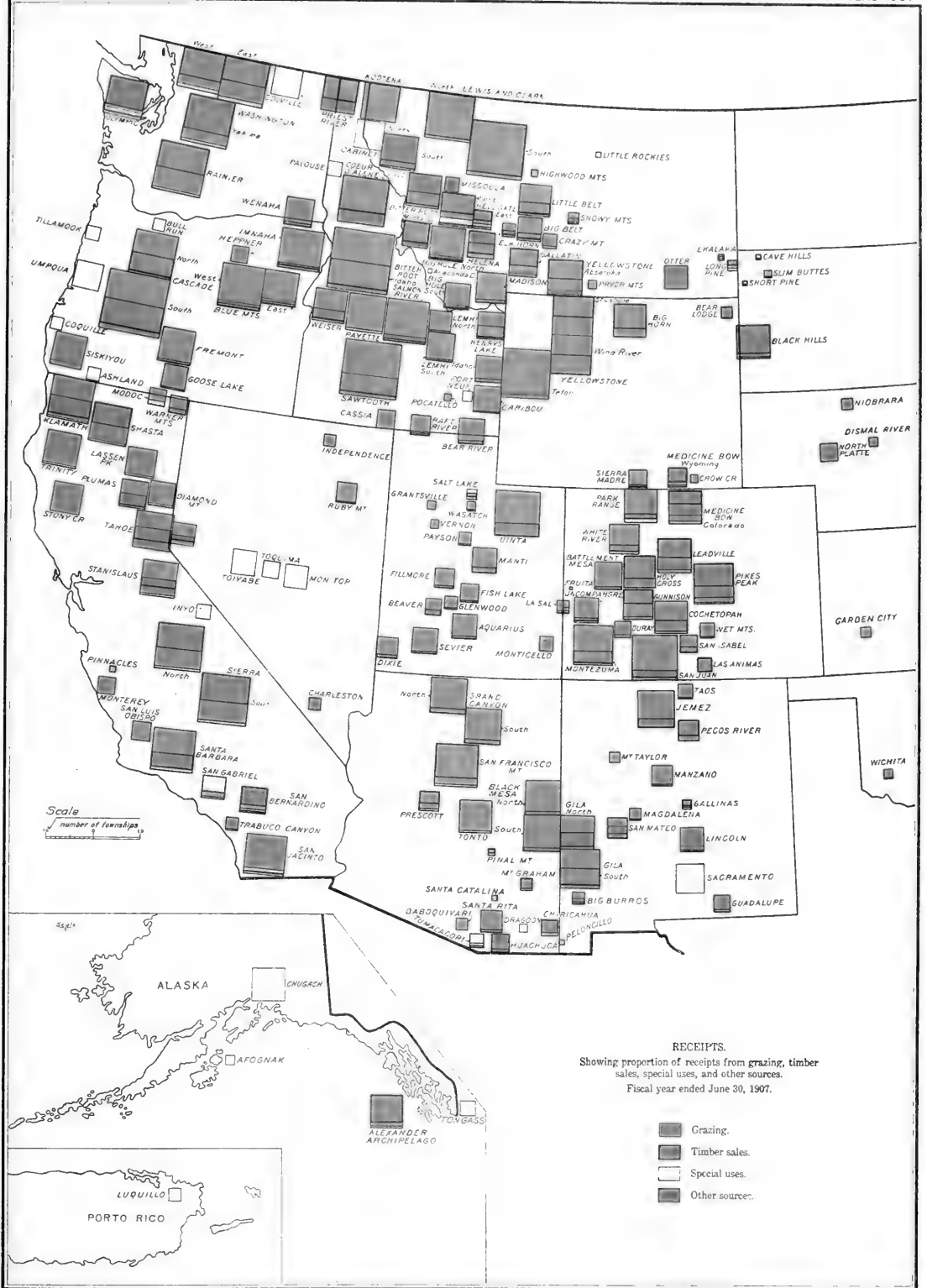
### PERMANENT IMPROVEMENT WORK ON NATIONAL FORESTS AMOUNTS ALLOTTED -BY STATES.

Fiscal year 1907-08.

NOTE: The amount actually expended in each State will differ from these allotment figures, but such expenditures can not be ascertained until after the close of the fiscal year.



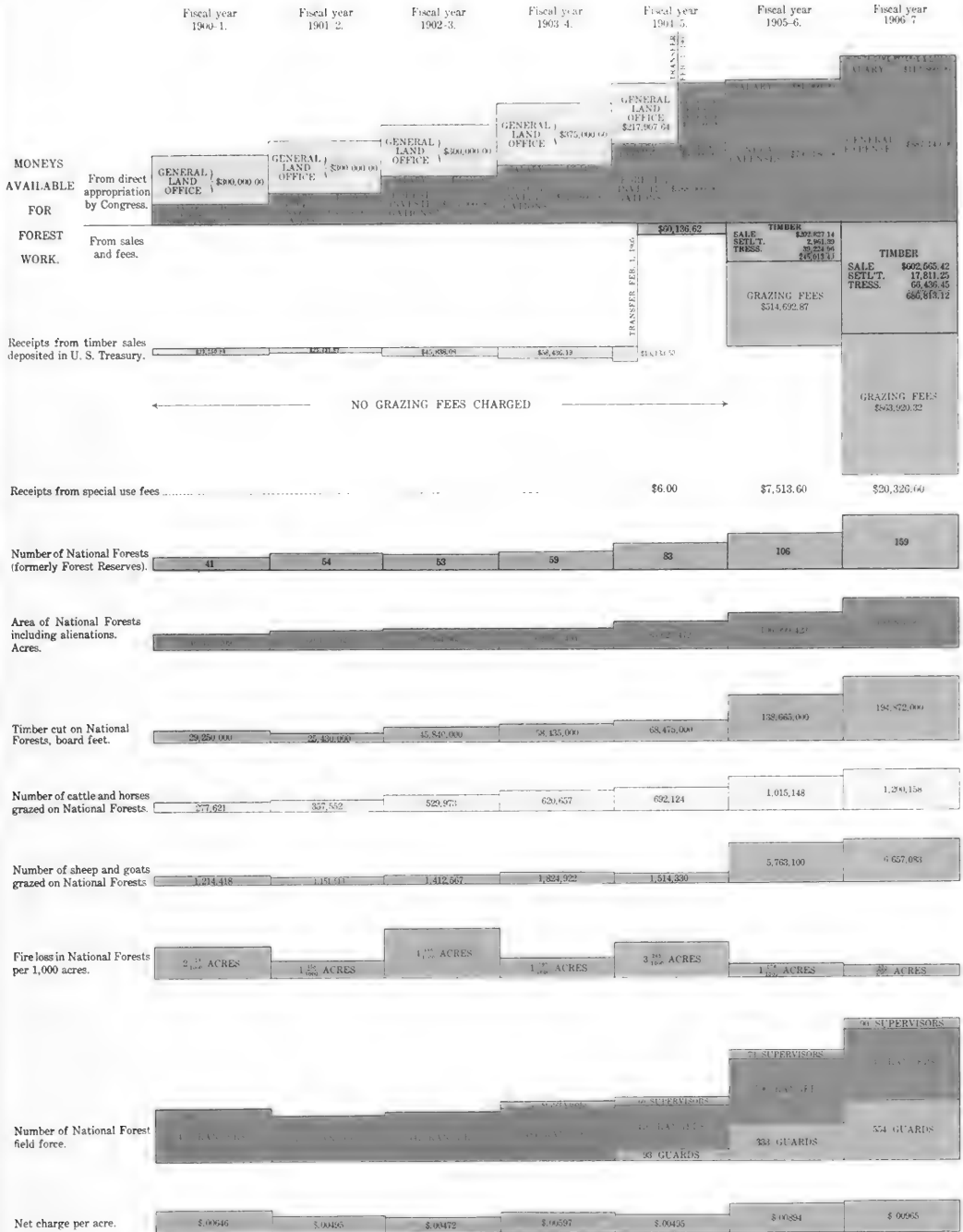




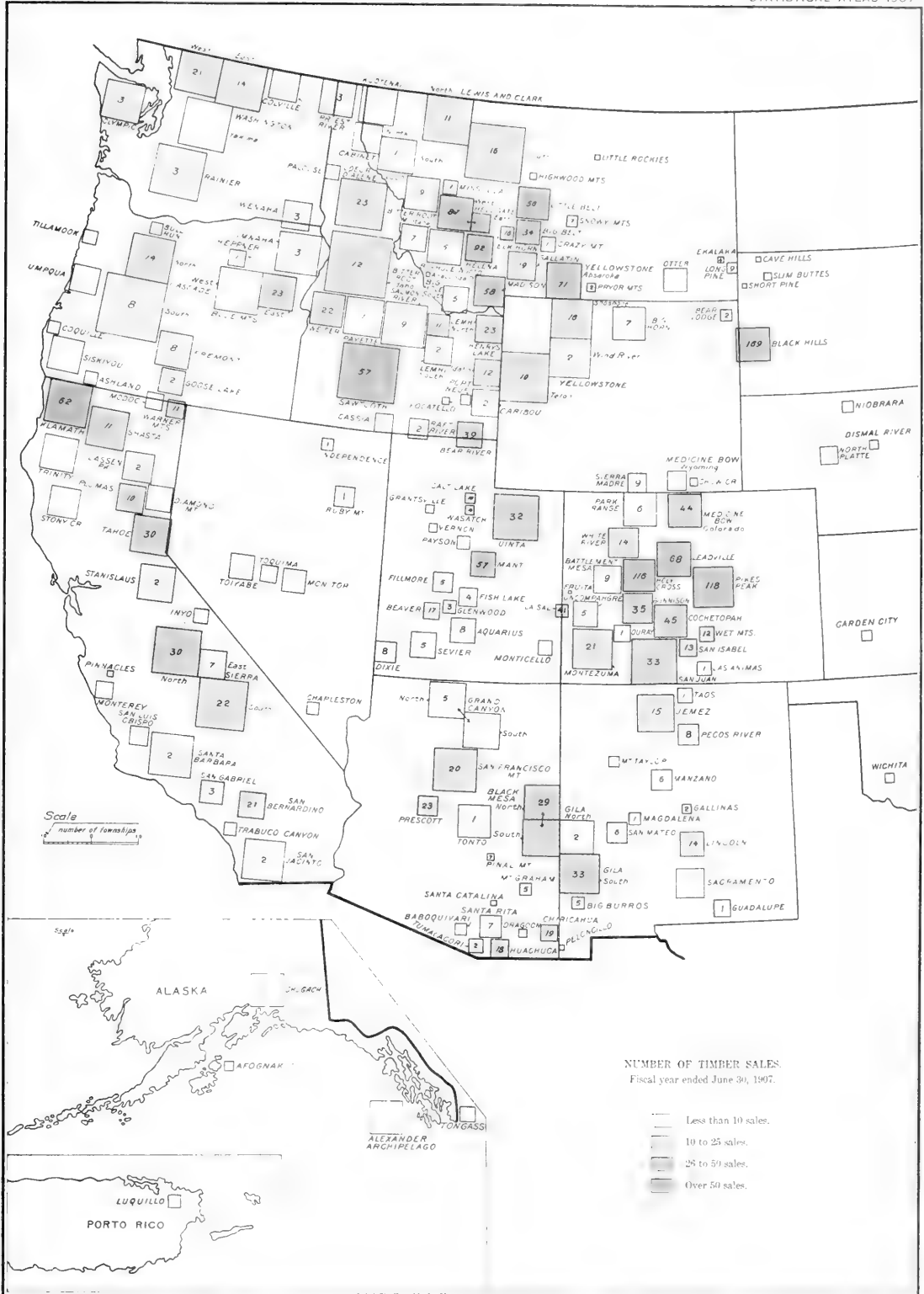




GROWTH



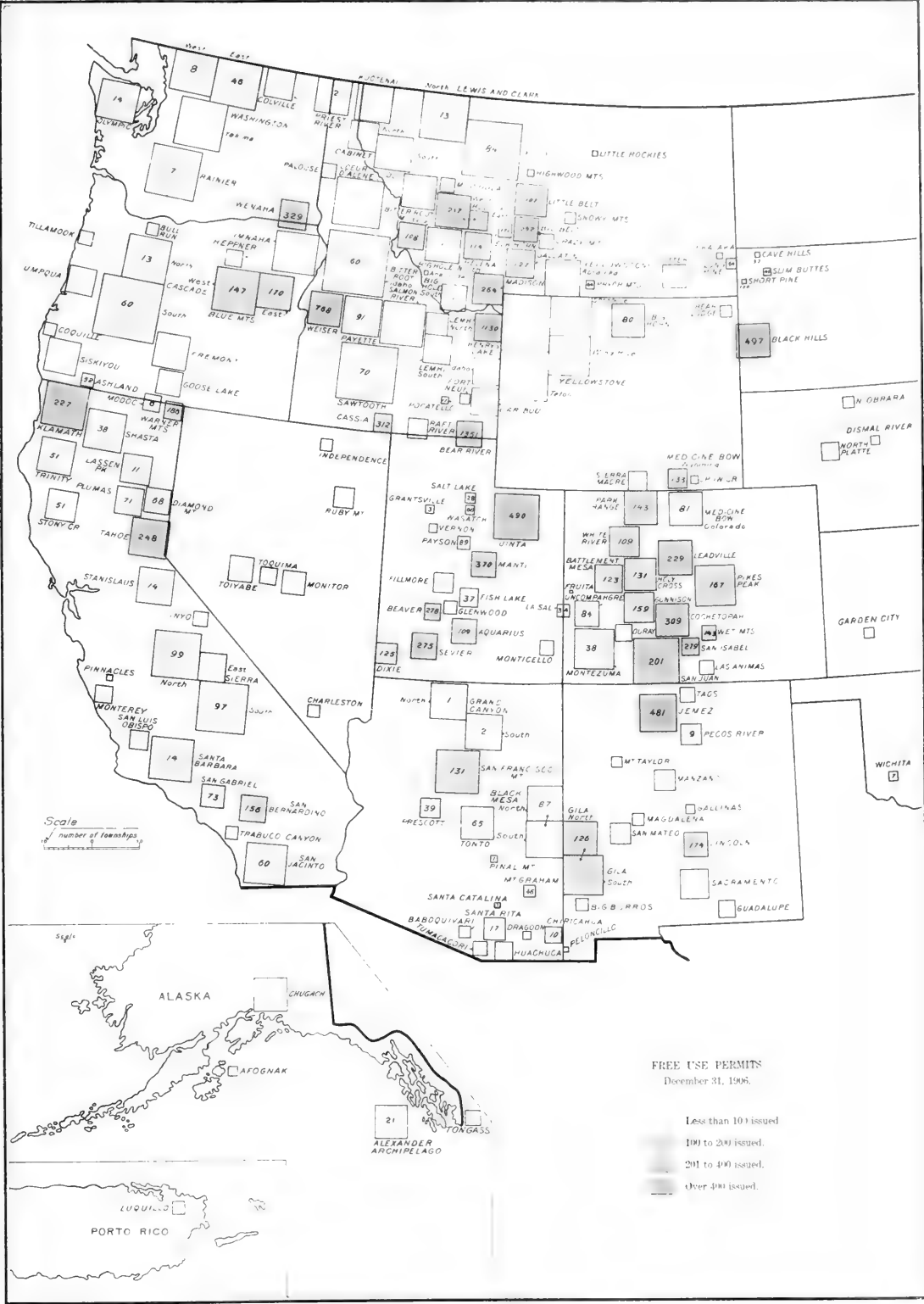




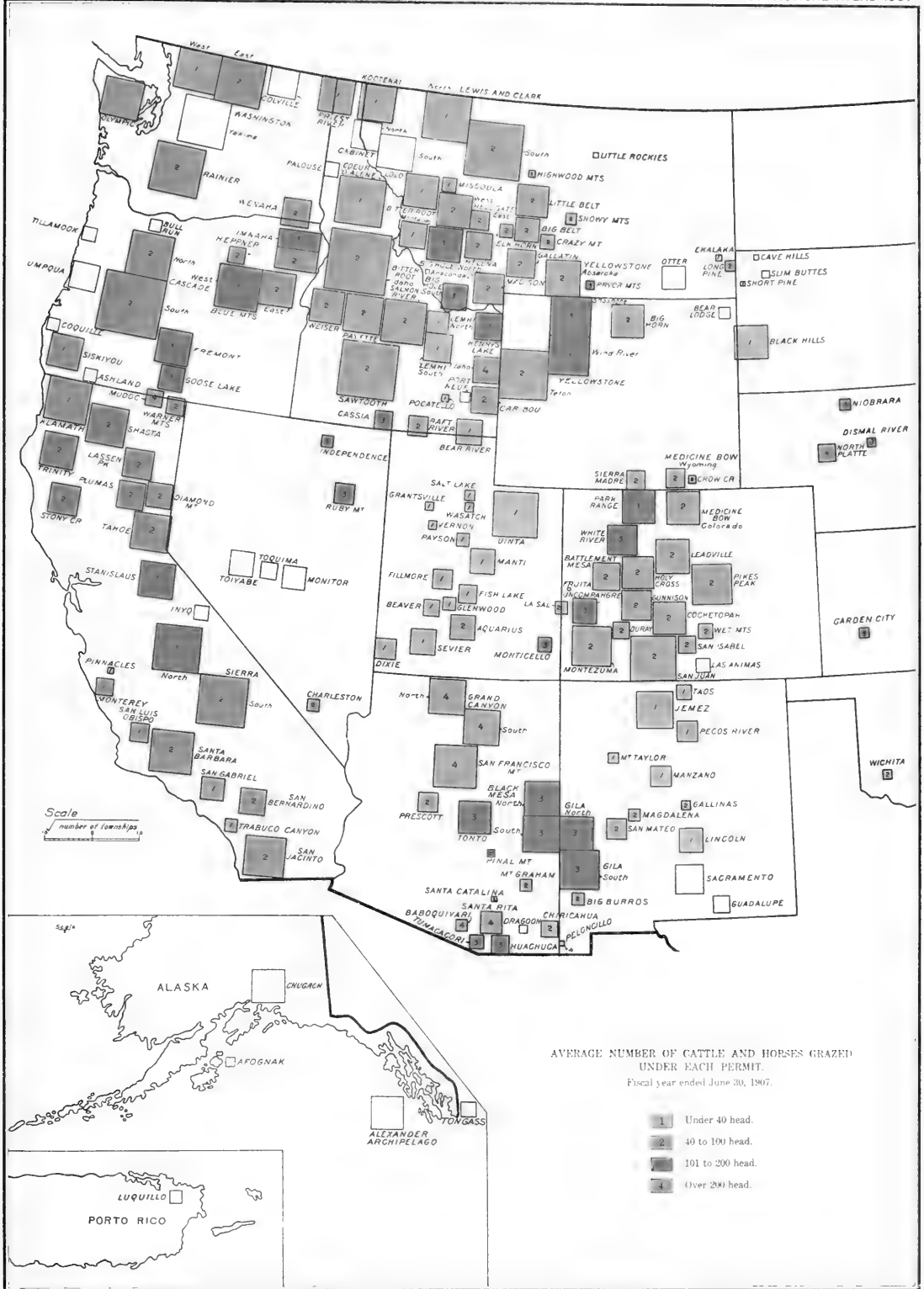
NUMBER OF TIMBER SALES.  
Fiscal year ended June 30, 1907.

- Less than 10 sales.
- 10 to 25 sales.
- 25 to 50 sales.
- Over 50 sales.



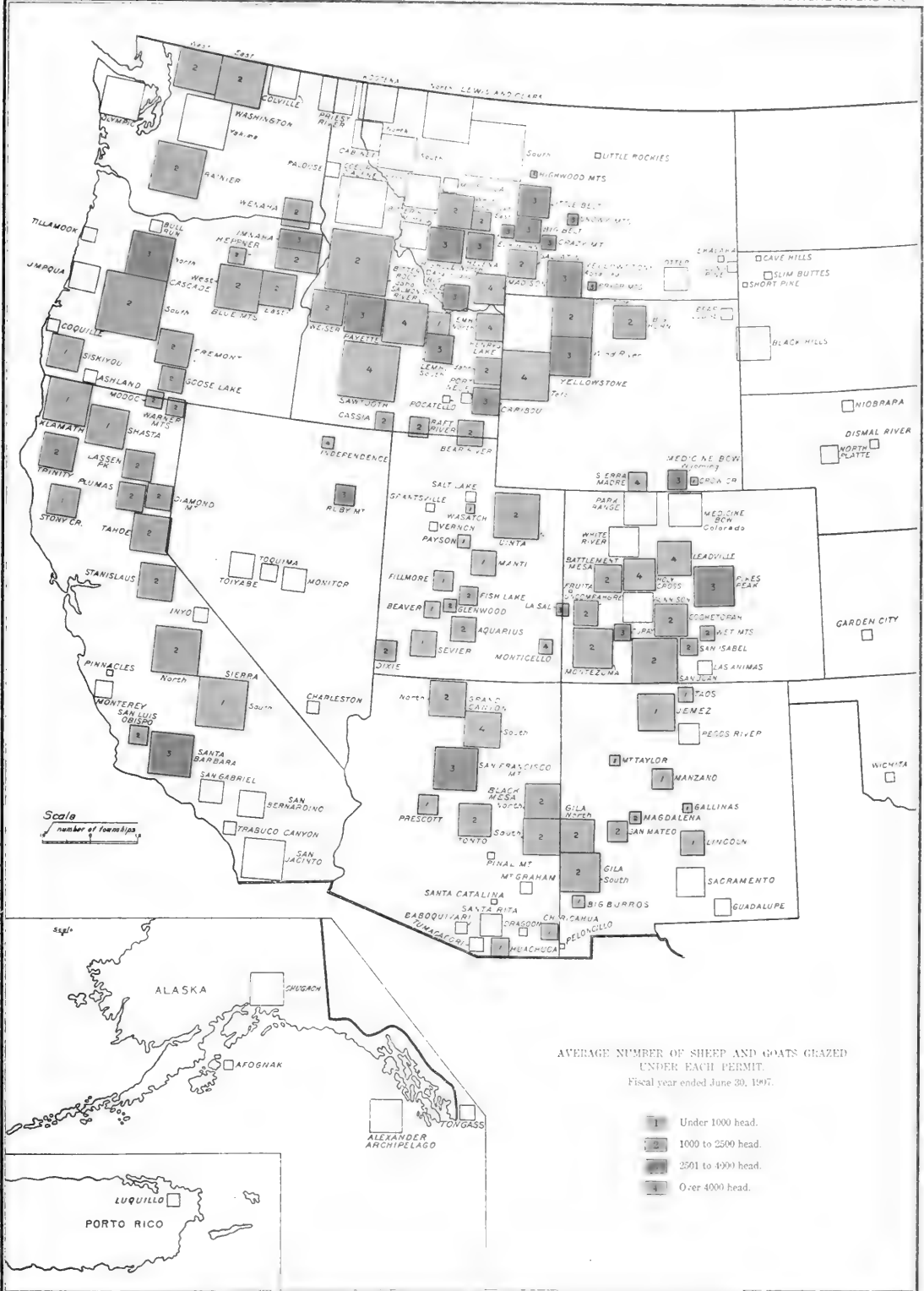








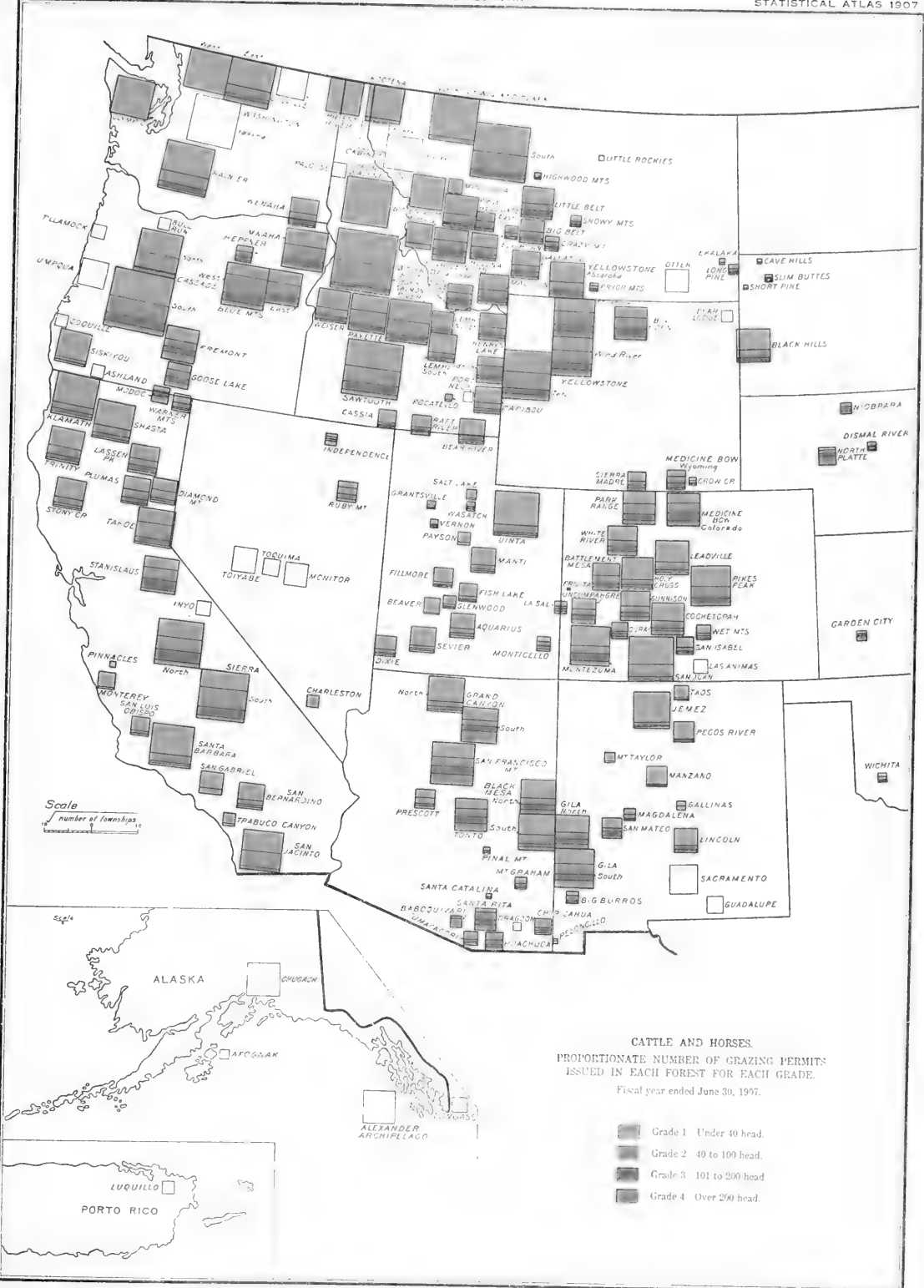




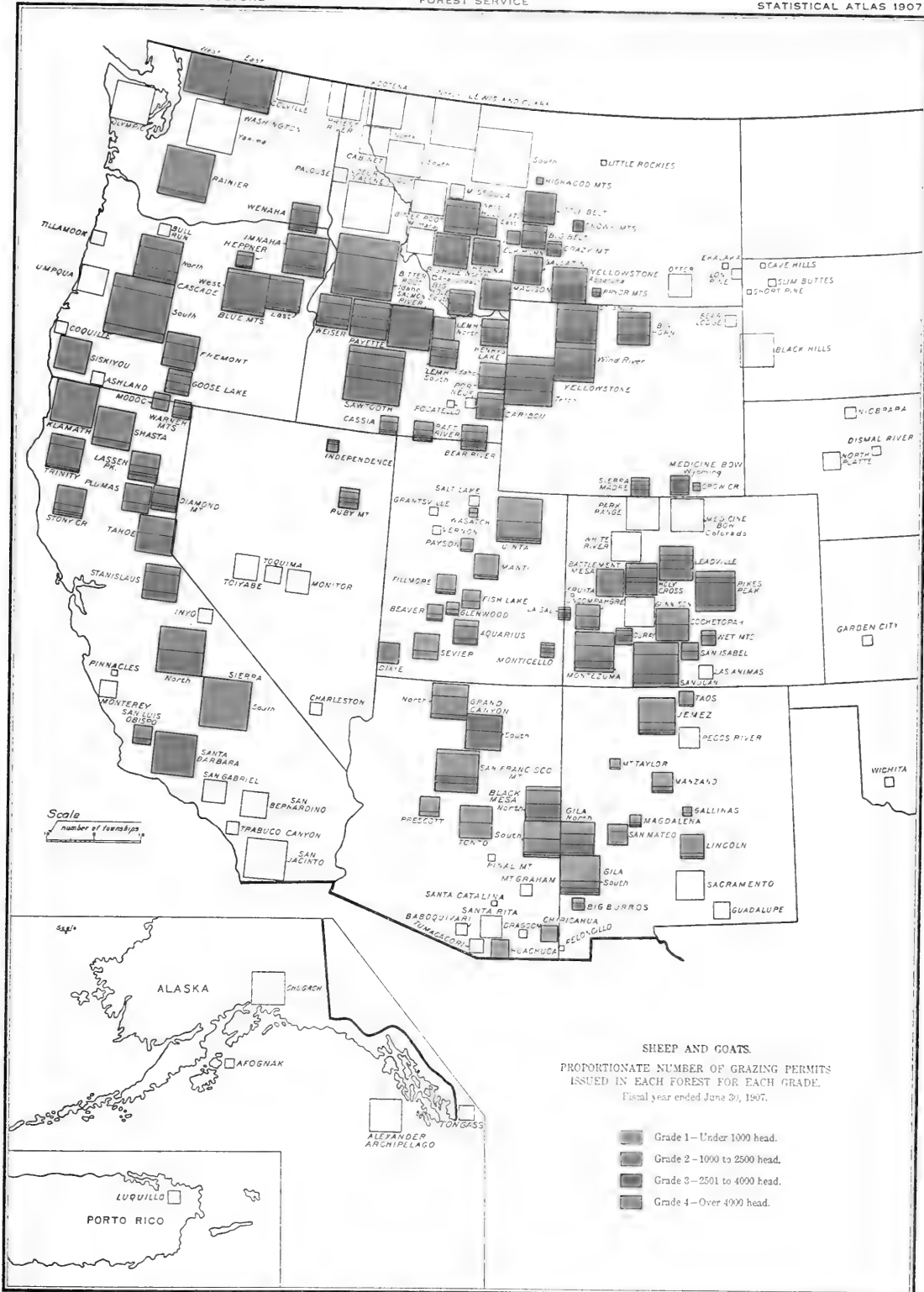
AVERAGE NUMBER OF SHEEP AND GOATS GRAZED UNDER EACH PERMIT.  
Fiscal year ended June 30, 1907.

- 1 Under 1000 head.
- 2 1000 to 2500 head.
- 3 2501 to 4900 head.
- 4 Over 4900 head.

















## USE OF NATIONAL FOREST LANDS AND RESOURCES.

KIND AND NUMBER OF PERMITS ISSUED SINCE CREATION OF THE FORESTS TO CLOSE OF  
FISCAL YEAR ENDED JUNE 30, 1907.

## SPECIAL USE.

Kind of permit.	Number.		Kind of permit	Number	
	Charge.	Free.		Charge.	Free.
Agricultural	245	21	Observatory		1
Agricultural and pasture	9		Office		1
Apiary	52		Park		1
Assay office	1		Pasture	396	
Banking ground		1	Poultry ranch		1
Barn	6	4	Powder house		1
Bath house	1		Power plant	19	
Boat		4	Quartz mill		1
Brick manufacture	2		Railroad	7	1
Building		5	Railroad (logging)		1
Cabin	35	18	Railroad siding		1
Camp	13	5	Railroad station		1
Cattle feed yard	1		Reservoir	44	118
Cemetery		2	Residence	123	5
Charcoal pit		1	Resort	20	2
Church		1	Restaurant		1
City reservoir and conduit		1	Road	19	202
City watershed		1	Sale of barbed wire		1
Clearing river		1	Sale of sand and stone	7	
Conduit	89	235	Sanitarium		1
Corral	4	55	Saw mill	11	45
Culvert		1	School	2	11
Dairy	2		Shed		1
Dam	2		Skidway		1
Dipping vat	2		Slaughter house	7	1
Drain, pipe line, and power house		1	Smelter site	2	
Drift fence		140	Stable		1
Dump ground		2	Station ground		4
Engine		1	Stage station		2
Experiment station		1	Steam boat		8
Ferry landing		1	Steam thresher		3
Fish hatchery	2		Store	24	7
Fishing site	5		Telephone		100
Fox ranch	2		Trail		50
Hay sale	53		Tramway	8	5
Hotel	53		Tramway (aerial)		1
Hunting permit		3	Transmission line	12	
Ice pond	1		Trout pond		1
Kiln	3		Tunnel		1
Laundry		1	Use of creek		1
Lime kiln	2		Well		9
Livery stable	2		Well, windmill, and tank		1
Log chute		5	Wharf	2	
Logging pond	1		Windmill	1	1
Lumber camp	1		Wood yard		1
Lumber yard		1			
			Total	1311	1471

## KIND AND NUMBER OF PERMITS AND NUMBER OF TIMBER SALES.

(Recapitulated by years)

Year issued.	Special use.	Grazing.	Crossing forest with stock.	Free timber.	Total permits.	Timber sales.
Fiscal years 1891 to 1898 inclusive						
Fiscal year 1899						6
Fiscal year 1900						12
Fiscal year 1901		2,317		283	2,600	31
Fiscal year 1902		3,126		1,289	4,415	77
Fiscal year 1903		4,554	8	2,135	6,697	156
Fiscal year 1904		6,733	277	3,239	10,249	377
Fiscal year 1905	298	7,981	346	3,363	11,988	411
Fiscal year 1906	604	16,593	503	8,097	25,797	1,023
Fiscal year 1907	1,880	21,788	1,449	17,399	42,516	1,508
Total	2,782	63,092	2,583	35,805	104,262	3,601

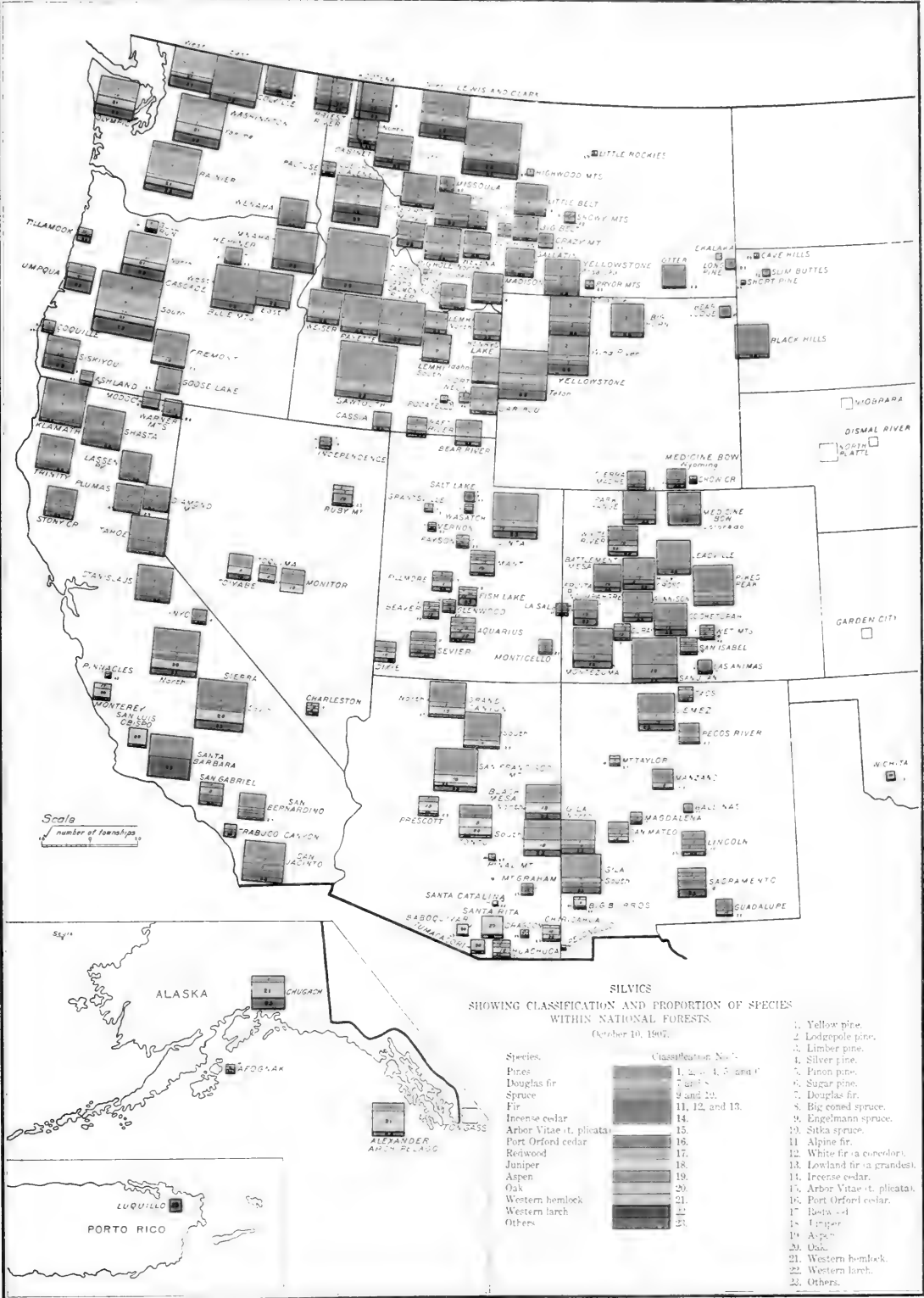
NOTES—Canal, ditch, flume, pipe line, and other water transmission permits included with those for conduits.

Special use pasture permits not included under "Grazing."

Two hundred and twenty-three special use permits issued prior to February 1, 1905, included in number reported for fiscal year 1905.

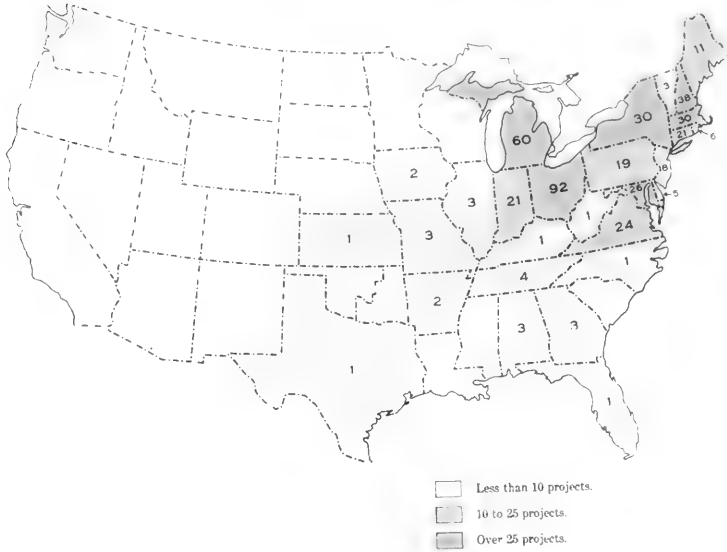
Permits are not required for "prospecting for minerals, transient camping, hunting, fishing, and surveying for lawful projects." (P. 43, Reg. 6 of The Use-Book for 1907).



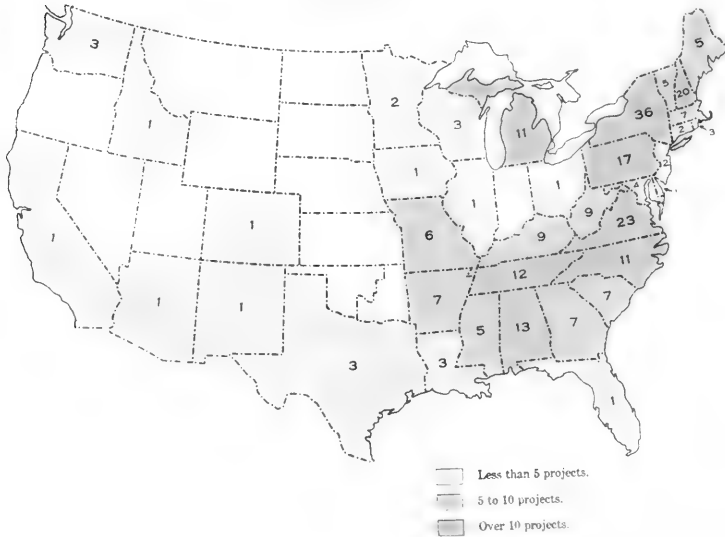




NUMBER OF WOODLOTS, BY STATES, ON WHICH WORK HAS BEEN DONE BY COOPERATION  
December 20, 1907.



NUMBER OF TIMBER TRACTS, BY STATES, ON WHICH WORK HAS BEEN DONE BY COOPERATION.  
December 31, 1907.

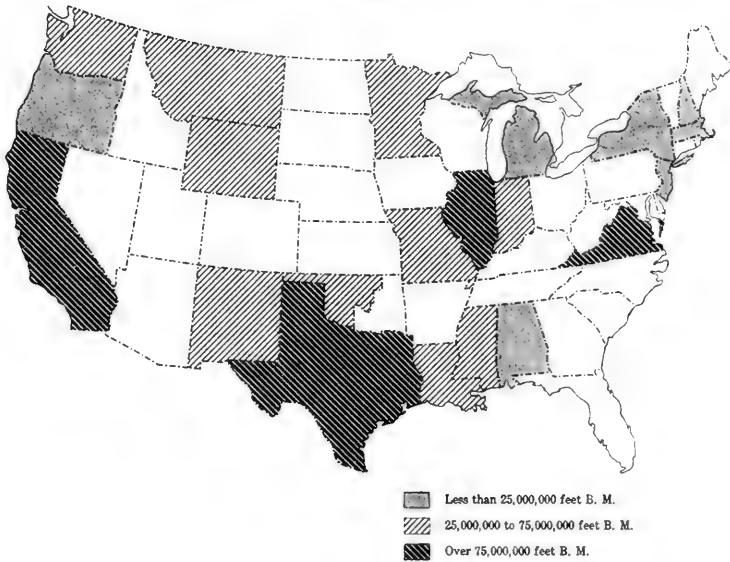




TIMBER TESTS BY THE FOREST SERVICE.  
December 31, 1907.



OUTPUT OF TREATING PLANTS IN THE UNITED STATES—BY STATES.  
1907.







PRODUCTS

December 31, 1906.

WOOD USED FOR HARDWOOD DISTILLATION



- None.
- Less than 40,000 cords.
- 40,000 to 100,000 cords.
- Over 300,000 cords.

WOOD USED FOR SOFTWOOD DISTILLATION



- None.
- Less than 1,000 cords.
- 1,000 to 10,000 cords.
- Over 10,000 cords.

LOCATION OF WOOD PRESERVATION EXPERIMENTS.



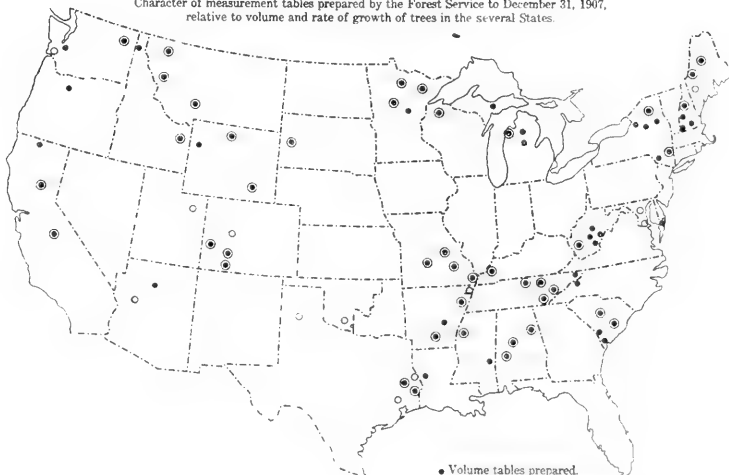
Numbers indicate more than one experiment.

LOCATION OF WOOD TREATING PLANTS.



MEASUREMENT TABLES.

Character of measurement tables prepared by the Forest Service to December 31, 1907, relative to volume and rate of growth of trees in the several States.

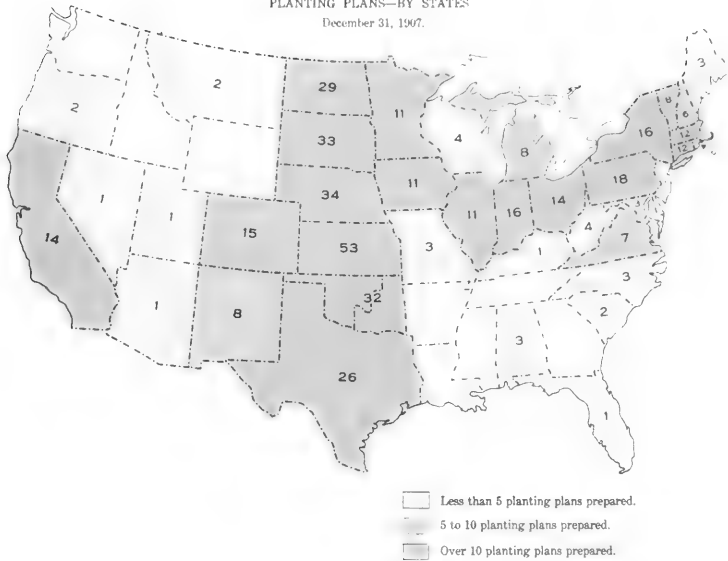


- Volume tables prepared.
- Diameter growth tables prepared.
- ⊙ Volume and diameter growth tables prepared.



PLANTING PLANS—BY STATES

December 31, 1907.



COOPERATIVE PLANTING PLANS.

December 31, 1907.





PRODUCTS

December 31, 1906.

PRODUCTION OF LATH.



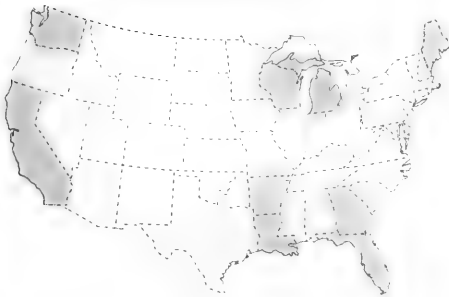
Under 25,000 thousand.  
 25,000 to 50,000 thousand.  
 50,000 to 200,000 thousand.  
 Over 200,000 thousand.

CONSUMPTION OF TANBARK



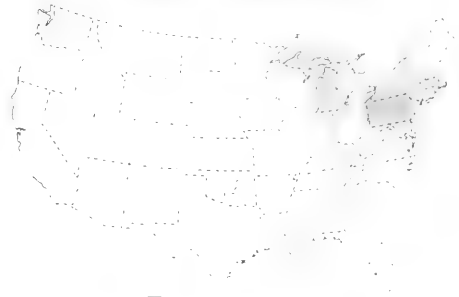
Under 10,000 cords.  
 10,000 to 40,000 cords.  
 40,000 to 100,000 cords.  
 Over 100,000 cords.

PRODUCTION OF SHINGLES.



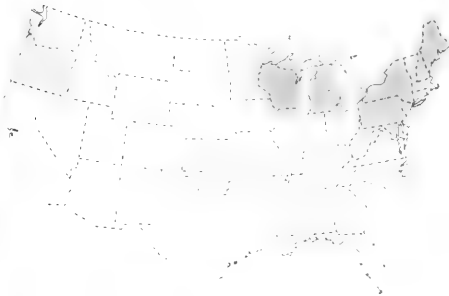
Under 50,000 thousand.  
 50,000 to 100,000 thousand.  
 100,000 to 500,000 thousand.  
 Over 500,000 thousand.

CONSUMPTION OF TANNING EXTRACTS.



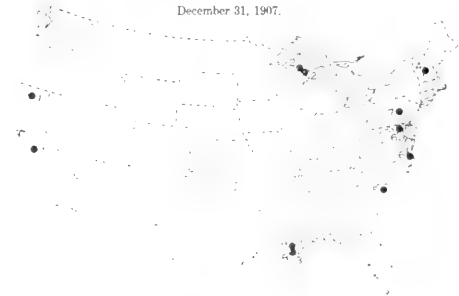
Under 10,000 barrels.  
 10,000 to 40,000 barrels.  
 40,000 to 80,000 barrels.  
 Over 80,000 barrels.

CONSUMPTION OF PULPWOOD



Under 30,000 cords.  
 30,000 to 100,000 cords.  
 100,000 to 500,000 cords.  
 Over 500,000 cords.

PULPWOOD INVESTIGATION TO  
 December 31, 1907.

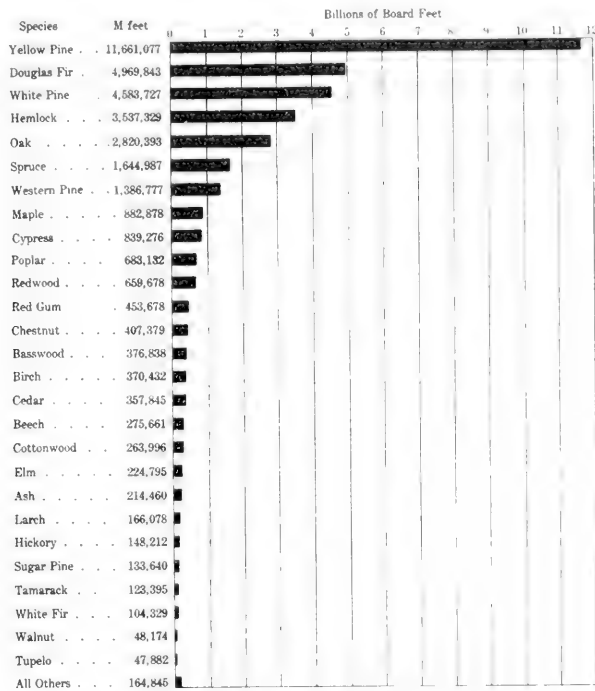


Species tested.

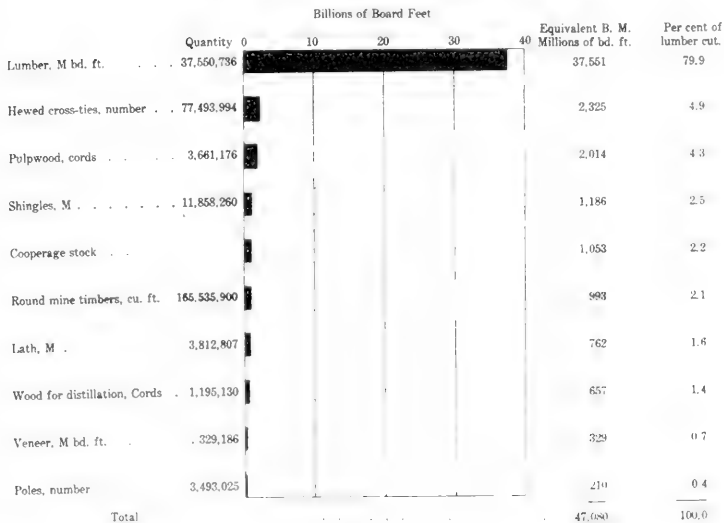
1. *Abies concolor.*
2. *Larix laricina.*
3. *Nyssa aquatica.*
4. *Picea rubens.*
5. *Pinus taeda.*
6. *Pinus virginiana.*
7. *Tsuga canadensis.*
8. *Taxodium distichum.*
9. *Taxodium distichum* (Pechy).



LUMBER CUT OF THE UNITED STATES, BY SPECIES, 1906.



OUTPUT OF FOREST PRODUCTS IN 1906.







LUMBER CUT IN EACH STATE.  
December 31, 1906.





### COMPARISON OF STUMPAGE VALUES.

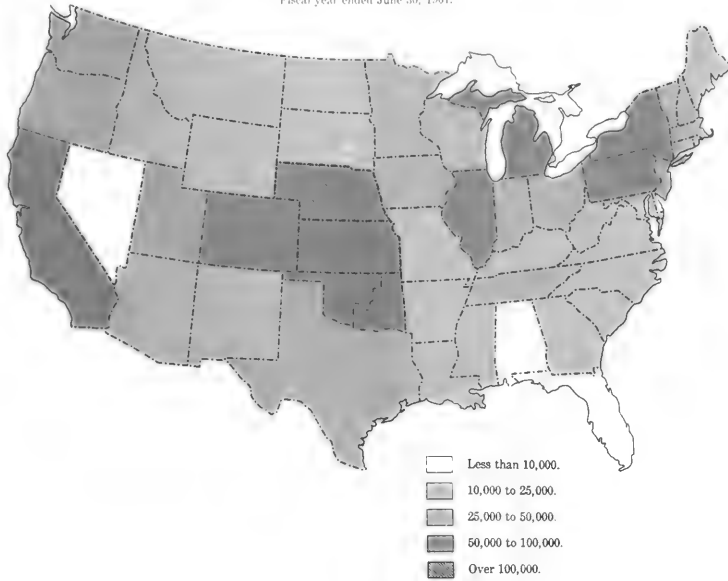
For the years 1899, 1904, and 1907.

SPECIES.	AVERAGE VALUE PER THOUSAND FEET.		
	1899.	1904.	1907.
White pine	\$3.66	\$1.62	\$8.09
Ash	9.00	7.90	7.58
Basswood	1.30	3.89	6.79
Hickory			6.69
Oak	3.15	3.80	6.52
Spruce	5.24	3.70	b 5.49
Chestnut	4.71	3.39	4.97
Elm	3.30	5.58	4.94
Poplar	2.81	3.89	4.64
Cedar	1.32	1.49	4.63
Hemlock	2.56	3.51	c 4.81
Birch			4.40
Cypress	1.58	3.42	4.37
Cottonwood	1.45	2.61	3.97
Beech			3.56
Yellow pine	1.12	1.68	3.16
Maple	2.66	3.82	2.50
Red gum	1.68	1.67	2.46
Redwood	1.06	1.55	2.35
Western pine			1.66
Douglas fir	.77	1.05	1.44
Tupelo			1.37

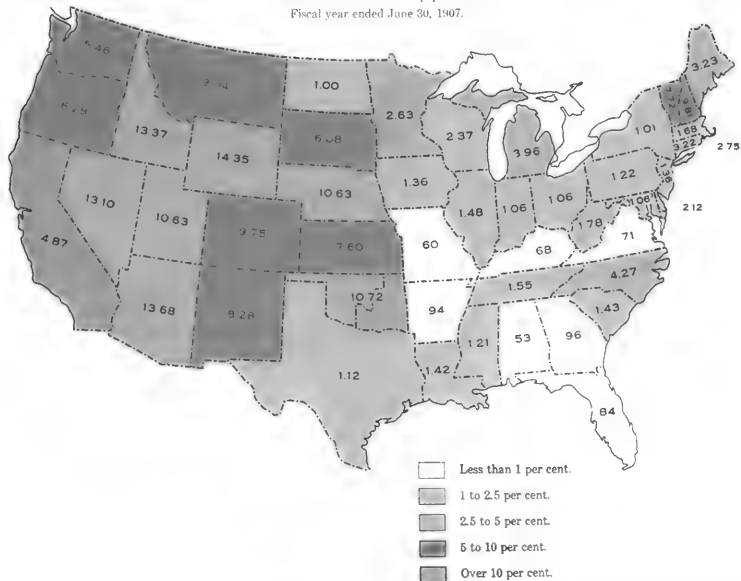
a. White oak only.  
 b. Eastern spruce only.  
 c. Eastern hemlock only.



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Fiscal year ended June 30, 1907.

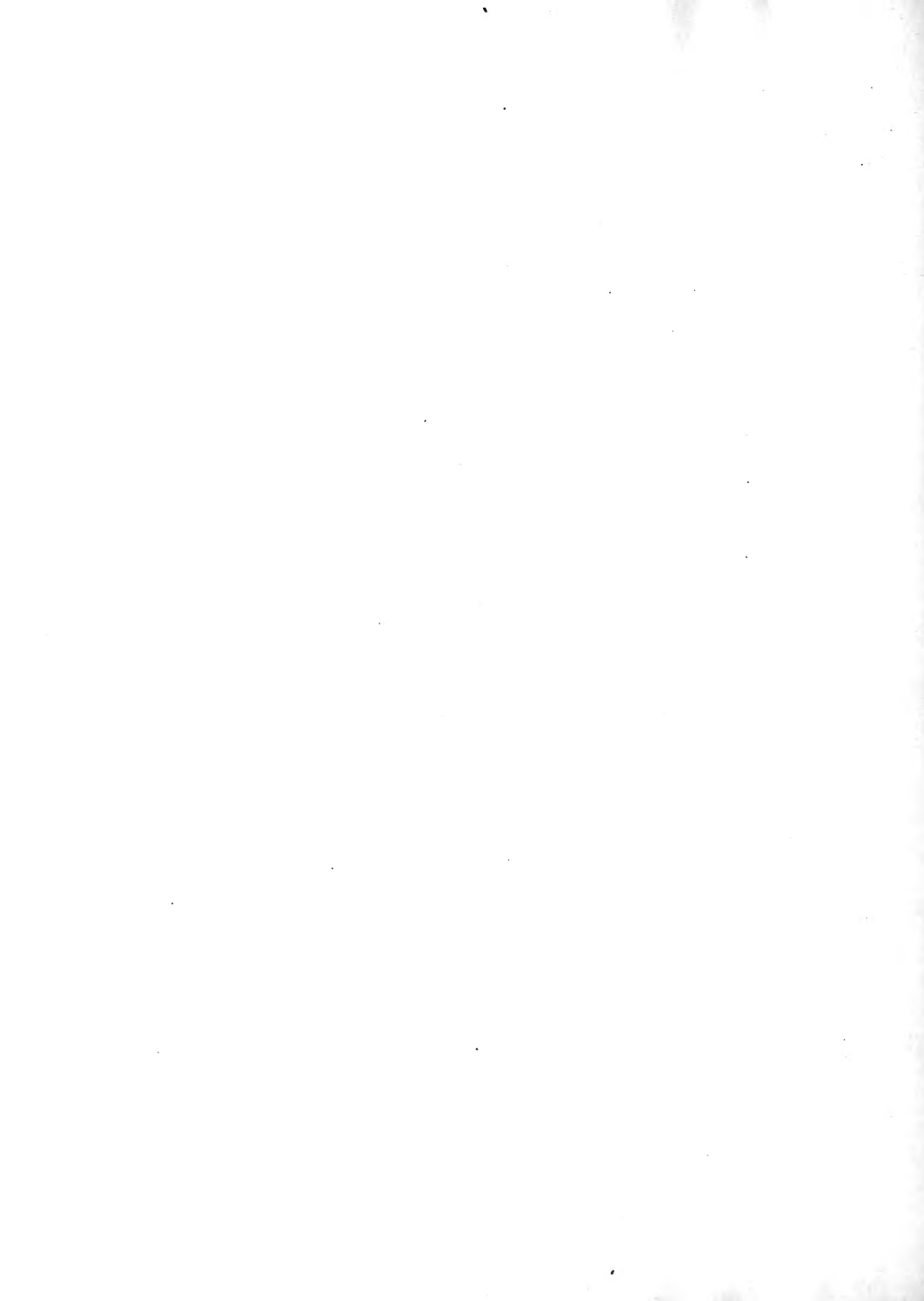


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